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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,518	06/27/2001	Robert William Dixon	STL9981/40046.155USU1	5994

23552 7590 06/23/2004

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EXAMINER

CHEN, ALAN S

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 06/23/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/894,518

Applicant(s)

DIXON, ROBERT WILLIAM

Examiner

Alan S Chen

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/12/2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-9,14-17 and 22 is/are rejected.
- 7) ☒ Claim(s) 2-5,10-13,18-21,23 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED FINAL ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1, 6-9, 14-17 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by No. 6,499,083 to Hamlin.

3. As per claims 1, 9 and 17, Hamlin teaches a method and system for handling multiple data streams in a disc drive (see abstract, column 6, lines 46-50, column 9, lines 27-29, Figs. 1 and 2) comprising steps of: a) allocating a buffer size required by each data stream currently being handled (see column 9, lines 39-47, column 11, lines 9-16); b) utilizing the buffer sizes found in allocating step a) for corresponding data streams (column 7, lines 3-4, column 16, lines 27-67); c) when an additional data stream is to be added, reallocating the buffer size required by each data stream including the addition data stream (see column 17, lines 1-16, column 21, line 53-column 22, line 24 and Fig. 19); and d) when a data stream currently being handled is to be terminated, reallocating the buffer size required by each data stream that will remain after the data stream is terminated (see column 20, lines 34-40, lines 54-64, column 22, lines 20-38, Figs. 16, 17 and 19).

4. As per claims 6-8, 14-16 and 22, Hamlin further teaches the method and the disc drive further comprising: receiving by the disc drive, one or more of the data streams (see column 9,

Art Unit: 2182

lines 32-35, column 11, lines 6-14); sending by the disc drive, one or more of the data streams (see column 9, lines 54-59); wherein a sum of the buffer sizes allocated for the data streams is less than the total size of the buffer of the disc drive (see column 16, lines 27-43); receiving by the disc drive data not in a stream (see column 9, lines 36-38); sending by the disc drive data not in a stream (see column 10, lines 61-66).

Response to Arguments

5. Applicant's arguments filed, with respect to the rejection(s) of claim(s) 1, 6-9, 14-17 and 22 under 35 U.S.C §102(e) have been fully considered but they are not persuasive. Examiners reasons are given below.

Rejections under 35 U.S.C. 102(e)

6. Applicant argues Hamlin has no suggestion or teaching of allocating a buffer size required by each data stream as applicant claims. Applicant contends that recording processes continuous data stream is divided or partitioned into a multiplicity of incoming data segments that are temporarily stored in buffer memory does not anticipate the allocation of buffer size required by each data stream as applicant claims. Applicant further argues Hamlin does not teach or suggest allocating a buffer size required by each data stream and that the storage disc is not a buffer.

Examiner disagrees with applicants arguments and clarifies his rejection here. First, it is expressly stated in Hamlin the ability to handle multiple data streams (Column 4, lines 48-52) thereby anticipating "...handling multiple data streams in a disc drive". Next, it is clear that the definition of a buffer is a memory that is used for temporary storage. More rigorously, the definition of a "buffer" as per The Authoritative Dictionary of IEEE Standards Terms (included

in this action) is as follows: "A device in which data are stored temporarily, in the course of transmission from one point to another". According to all indications of Hamlin, his disk based storage system meets this definition of a buffer. The data stream currently being handled is segmented and stored in memory (element 110) such that each data segment of a data stream is assigned pointers to denote the address that the data stream occupies in the memory, requiring a head and tail pointer (Column 10, lines 4-10), denoting the size of memory required (e.g., tail pointer address minus head pointer address). These head/tail pointers are subject to change based on modification of the data segments. Therefore the step in the claim "...allocating a buffer size required by each data stream currently being handled" is anticipated. These pointers are then utilized for manipulation of the data segments, e.g., concatenating them together to form each individual continuous data streams that the storage apparatus is handling (Column 9, lines 55-60) as claimed in step b) of claim 1 by applicant. Since each data stream is partitioned into data segments, the buffer size (in Hamlin's context the memory partitions within the storage device, element 110) must be reallocated (the addition of new head/tail pointers designating the new data stream data segments) to accommodate each new data stream. Claim 1, step c) is thereby anticipated. Lastly, in supporting the rejection of claim 1, step d) in the first action, the data segments of each data stream can be modified, e.g., addition/deletion of data segments (Column 4, lines 53-63), thereby forcing the reallocation of the pointers in the memory.

Allowable Subject Matter

7. Claims 2-5, 10-13, 18-21 and 23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

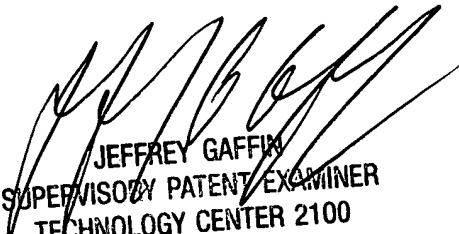
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S Chen whose telephone number is 703-605-0708. The examiner can normally be reached on M-F 8:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on 703-308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2182

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ASC
06/18/2004


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